

ABSTRACT

A variable beam divergence FSO optical transmitter is described, as well as a method for altering the transmission power being radiated in a telescope for laser on air telecommunications systems. The method calls for the transmission of a very wide angle of the laser beam, in any case sufficient to ensure the quality of the link, when the level of atmospheric attenuation is at a minimum (good visibility conditions) and for a reduction of the beam, in a linear way, in order to increase the density of the power transmitted when visibility becomes poor (increase in atmospheric attenuation due to mist or fog). To increase or decrease the divergence of the beam, the distance between the source of light and the lens is altered in a suitable manner. After evaluating the extent of the variation due to atmospheric attenuation, arrangements are made to alter to a suitable extent the angle of the laser beam that is radiated.